

Transcript of EPA/Upper Silver Creek Watershed Stakeholder Group Public Meeting
Moderated by Blair Fuelner and broadcast live on KPCW
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Yarrow Hotel, Park City, UT
Approximately 80 attendees.

Transcript prepared by EPA Region VIII. This transcript was not done by a court reporter and is inexact. Some names may be misspelled. May contain grammatical errors.

BF: Blair Fuelner, KPCW
JC: Jim Christiansen, EPA
BJ: Brad Johnson, UDEQ
TR: Toby Ross, PCMC
KG: Kerry Gee, UPCM
AL: Arlene Loble

BF: Good evening and thank you for tuning in to a special town meeting to talk about why the Environmental Protection Agency is back and why they want to conduct what's being called an Upper Silver Creek Watershed Investigation in our area. I'm Blair Fuelner and we're broadcasting live from Mountain View Room at the Yarrow Hotel and Conference Center. Please come on down and join us because the second half of the program will be your chance to ask questions and share concerns with the EPA and other panelists. With us from Region VIII in Denver is Jim Christiansen, along with Park City Manager Toby Ross, Kerry Gee from United Park City Mines, and Brad Johnson, Superfund Branch Manager from the Utah Department of Environmental Quality. (Commercial) The format for tonight's meeting will be a brief presentation from our panelists, followed by some questions from myself, then starting at 8:00 it's your chance to ask questions and give feedback. Again, for those listening at home I'd love for you to come on down to the Yarrow and meet with us here and it will be your chance in the 2nd half of the program to talk with EPA, city officials, and state health dept officials. Let's begin with Jim Christiansen from Region VIII EPA telling us why he's back:

JC: Again, I am Jim Christiansen. I'm the EPA project manager for our work here in Park City. First, I want to thank everybody for coming out. I know it's a real busy time in Park City; a lot of meetings going on and I appreciate your concern for the environment and your concern for EPA's presence here in Park City. I don't have a lot of time up front but there's a few things I wanted to make sure we said, so I'm going to focus on those. What we want to get across at this meeting are three things: First, why we feel this work is needed. Why is EPA here in the first place and why are we here today talking about this? Second, what we're trying to accomplish with this work and how we plan on accomplishing that work. And third, how we plan on conducting that work in cooperation with stakeholders and residents like you folks.

So I guess the first question: Why are we here? What are we doing here? Why do we feel this work is needed? There's really three answers to that. First of all, you've heard the trailer for the meeting on the radio - it says something to the effect of "EPA is back." We don't really see it us though we're back; we don't feel we really ever left. We certainly had a heightened presence in the 80s when we were dealing with Prospector Square and Richardson Flats. That's kind of faded away in some respects but we've continued to do other work throughout the last 10 or 15 years. Most of that revolves around site assessment, where we go through the process of finding sites, in this case mining sites, throughout this watershed. Only in the last few years have we really felt we've got a handle on what's out there and that we were prepared to address it. That's led to this watershed approach, where instead of working, focusing on one particular site, we're going to look at the whole area and the cumulative impact of these mining sites as well as any other kind of sites that are out there. So we really feel that we're here to finish the job, and not to start something new. Second, we've definitely identified some environmental issues that are of concern that we don't think we can walk away from. Two of those are particularly important. The first one is soils. There are several areas in and around Park City where mine waste is exposed or mine waste has migrated into soils where some metals, such as lead and arsenic, are present in quantities which are - could be - harmful to human health or the environment. The second one is Silver Creek itself. Silver Creek does not meet water quality standards for heavy metals and it's unable to sustain fish life. Certainly, through Park City it's not the best creek, but below Park City it's a valuable resource and it feeds into the Weber River. And then lastly, and I think this gets more to the question of why we're doing this now, is development. In the past when we've looked at some of these sites, they were out in the boondocks, if you will, and they weren't being affected by people or interacting with people. Three development projects come to mind: a planned golf course at Richardson Flats, the intermodal transportation facility at the Marsac Mill, and then the Flagstaff Development. All of those are in areas where there are environmental concerns. So we think it's very important to get in on the ground floor and do any investigation or cleanup that's needed before those projects move forward rather than after. I think everybody can see the logic of going in before rather than after the fact.

Next question, what are we trying to accomplish and what are we actually addressing here? I represent the Superfund program, but this isn't a typical Superfund type activity. There are no Superfund sites, if you will, in

Park City. The closest one to it is Richardson Flats. We're here to investigate hazardous substances and the one's we're concerned about are heavy metals from mine waste. We're going to focus on what I said what is the Watershed and that area is roughly from Bald Mountain at Deer Valley over to the head of Thaynes Canyon, down to Park Meadows and over to Richardson Flats. Really, the headwaters of Silver Creek. But we're not just focusing on water, as I said before. We're going to focus on three pathways, or we'd like to. The first of those being surface water and what gets into Silver Creek and how. The second is the soils in the area. And the third is ground water, which is used as a resource in the area and also interacts with surface water. So we want to look at all three of those things.

How we want to go about doing it is a lot different than we've done in the past. We don't want to come in and say 'this is how we're going to do the investigation and we're going to do it the Superfund way.' We want to do it cooperatively, we're not here with an answer or a definitive plan tonight, we're here to tell you this is how we're going to go about getting a plan by working with stakeholders and people like you. We want to get closure out of this. We're looking for final solutions. And that means different things for different places. It may not mean that we simply walk away, but that depends on the nature of the site. We are seeking to limit EPA's future involvement as much as we can and clean the area up as much as we can or as much as works for the people here. As far as timing, we don't think there are any screaming health concerns out there that require us to act tomorrow, we're always flexible for that to happen, but for now we're willing to work with the local situation. As long as we're making progress, these issues aren't brand new, they've been there for a long time, there's no need to act tomorrow. We want to continue to act accountably and relatively quickly but work with the local situation.

Lastly, I want to get at how we plan to work with local stakeholders and what "stakeholders" means - how we plan to work with residents like you. Over the last year I've been out talking to people who have a stake in what EPA may do, or has done in the past. And by a stake, that could mean someone with an obvious financial stake like a landowner; it could also mean just a resident who cares. We talked to a lot of people and we made a lot of progress getting interest in what we want to do and getting people involved. Several months ago, EPA, the State, United Park City Mines, and the City, hired jointly a neutral facilitation firm. They are called CDR out of Boulder. We hired them to assist us in the development of the stakeholder group so it was done by a neutral party. It wasn't just EPA saying 'these are the people we want involved' or the City or anybody else. So we think that group was put together relatively fairly and they are going to help us operate it or manage it in the short term, at least. Who's on that group? We don't think that it's an exact cross-section of the community, but we think we've done a pretty good job of getting some key interests. Right now, the stakeholder group consists of: Toby, the city manager of Park City representing the City, Fred Jones, city councilman for Park City, Kerry Gee with United Park City Mines, both Steven Thiriot and John Whitehead, who represent the Superfund and the Water Quality Divisions at the Utah Department of Environmental Quality, Sally Elliot who represents both Prospector Park and the Historical Preservation, Dana Williams for CARG, Bruce Waddell represents the United State Fish and Wildlife Service, Steve Jenkins and Pat Cone represent the County and the County Health Department, myself representing EPA, Bob Wells from Deer Valley and Doug Clyde from Park City Ski Resort. So we've got a pretty good cross section of people there who we plan to work with on a pretty frequent basis when we conduct work. The operation of the group right now - we are meeting about bimonthly and we've formed some sub-groups within that group to work on particular issues. For instance, we formed a community involvement group prior to this meeting so we could discuss how we were going to interact with the community and make sure that we did it appropriately and fairly and in a way that we got the message out. The final thing I want to end with, is how we want to conduct public involvement. We're "here to hear" what you have to say about that as well. This isn't set in stone, we're still formulating that plan. But we've got a number of ways we want to get information to the community and hear from you when we decide what we do and how we move forward. We plan to set up, and they should already be established, information repositories at both the library and city hall. Those will contain key documents from the past, and current things we're working on for people to review. For instance if we've got a draft out that we want people to take a look at, it will be there available for your review and reading. Second, we want to create a website and that's in the works right now. That web site should be up within a month or so and we'll be able to get the address out, but again you'll be able to look at key documents, find out next events, and find out what's going on so you're not in the dark. You know what EPA is

doing, you know what everybody else is working on, and you know where we're going next. We've been conducting interviews with the community, with regular residents out there just to find out what you're thinking, what you're feeling. Public meetings...this is just the first such meeting that we hope to have - this is kind of a starting point where we tell you we're here, this is how we want to do business, now let's move forward together, in a partnership, to get this done. We want to use the media, I've been on the radio quite a few times with Blair - probably too many times for my comfort. We talk to the newspapers regularly and we want to get the word out that way as much as we can. Lastly, we'll probably disseminate some fact sheets from time to time which give an update. You just grabbed the first one as you headed in which just kind of gave an overview of what we're talking about here tonight.

Overall, I just want to close by saying I think you're seeing a different EPA. We've learned a lot since the 80s, we're a better agency, we're better at what we do. We think there are some issues here and we want to work cooperatively to solve them and I think if we do work together, we can find a solution that works for Park City, works for EPA, and solves the issues that we're facing.

BF: Next, we'd like to hear from Brad Johnson, Superfund Branch Manager for the Department of Environmental Quality.

BJ: As was mentioned earlier, one of my primary responsibilities is management of the Superfund Program for the State of Utah. What I'm going to do is describe very briefly the role that the State plays in that program and the role that we will be playing as we go through this particular project. Our role in Superfund varies depending on the individual project. In some cases we will have a lead role where we have either our staff or contractors for the State doing investigation types of activities or construction work. In other cases, we will be in a support role where we are reviewing documents prepared by an EPA contractor, we are providing comments, and providing comments from a State standpoint. In this particular case, we will be in a support role to EPA and the reason that we are very interested in what is going on here is that we actually had seven ongoing investigations in the area at various old mining related sites that were in various stages in completion and as we were looking at it, it didn't make a lot of sense for us to pursue all of those independently. This watershed approach makes a lot more sense to use because it would be too easy for us to go in and do some fix at one site in the drainage that may not work or be appropriate relative to some other site in the drainage. So, doing this using this kind of approach is going to give us a much better comprehensive solution to all of the issues that we're trying to deal with. And so what we will be doing, as Jim mentioned, we will be participants in the workgroup, we will be reviewing all of the documents and providing comments. There are a variety of State standards that have to be considered as we look at various options for remediation of these problems and we will be providing comments relative to those State standards that have to be met. And so we look forward to continuing in this process - we think that it is a good approach and we're very enthusiastic about it. We are an independent State agency and so if there are any questions from the public we would be more than happy to hear from you and more than happy to represent those concerns. (Commercial)

BF: Next, City Manager Toby Ross.

TR: Thank you Blair. I'll offer just a few comments on Park City's participation in this process. We all live in a historic mining town, and as such we live with the legacy of mine tailings and waste rock and I think we all know that. But what does it all mean? Park City has a history of successfully dealing with mining-related activities and environmental problems. And Park City takes seriously it's role in protecting the public health and safety in this community. In that context, Park City is participating in the watershed investigation proposed by EPA because of several different reasons: (1) EPA has the authority to undertake this investigation with or without Park City, (2) we believe Park City has unique experience that would be valuable in this process, (3) Park City wishes to demonstrate it's continued willingness to deal with environmental issues locally, (4) Park City hopes to minimize the environmental and economic stigma that sometimes attends EPA investigations, (5) Park City prefers to seek cooperative solutions to environmental issues, (6) Park City wants to directly present its interest, issues, and positions to the stakeholders and also to the Federal and State regulatory agencies, (7) EPA has assured Park City

that the watershed approach would be fair and open and that Park City could have significant influence over the process and the outcomes.

Even given that commitment to be involved, we have questions which we hope this process will answer. Will the investigation reflect local circumstances and result in practical, community-based solutions; will the process remain flexible or evolve into rigid EPA requirements and processes; will any of the regulatory agencies seek damages; who will pay for the sampling, testing and remediation; how long will the investigation take (as a side note we had our first discussion on this about a year ago so it's not a rapid process by any means); and finally, and perhaps most importantly, will the investigation lead to a permanent solution? Thank you. (Commercial)

BF: And our final panelist this evening is Kerry Gee from United Park City Mining Company. Kerry -

KG: Thank you Blair and I'd like to thank everybody for coming out tonight. As Blair mentioned, I'm vice president of UPCM and I'm responsible for environmental issues and other natural resources issues related to the Company. I've been with United Park for about fifteen years, but I've been with the mining industry for about 27 years and I've worked in mines in Montana, Colorado, and other mining areas in Utah. I worked for Park City Ventures at the Ontario Mine for five years in various capacities including a mine geologist for about three years. I have a long history in Park City - I moved here with my parents in 1967. I graduated from Park City high school in 1972. As Toby mentioned, Park City has a long history of mining activity; it's a proud legacy for the town in some aspects. The miners who came here over 125 years ago founded the town in the spirit of adventure and left a legacy of independence that kind of still affects the people that live here. But we also have left an environmental legacy that at the time, no one could foresee. But it's one that we need to deal with today and it's one that the mining company needs to deal with on its properties that we have here in Park City, not only those that we intend to develop but those that we don't intend to develop. The last year and a half we've been working with the EPA and UDEQ to try to develop a remedy for Richardson Flat. It is a proposed Superfund Site, it has been proposed since about 1993. We've been very successful in working with the EPA, they have been very cooperative with us. It's been a change in posture for the company, the same change in posture we've seen with the EPA. We've also been working with them on other mine properties in the area to try to identify issues that revolve around those mine sites and come up with programs and plans to determine any impact from those mine sites and to try and come up with a mitigation plan if needed. We support what's going on with the watershed group; we feel it is very important to get the public involvement to make sure that what is decided on the properties is something that everybody wants and everybody can live with. (commercial)

BF: 80% of the people that are listening tonight were not here seventeen years ago for the three year battle that the City fought to keep Prospector off of the Superfund list. So, for the sake of history, for those who perhaps just moved here recently and aren't aware of that history, I recorded an interview earlier today with the person who was the city manager back in 1983, Arlene Loble, who is presently city manager in Wilsonville, Oregon, just outside of Portland, to ask her why the city at that time felt so strongly that it wanted to keep the area off of the Superfund list. So, here's part of that interview:

BF: Arlene, for those who weren't here then, could you kind of set the scene for what happened and why the city felt so strongly that they didn't want to be a Superfund Site?

AL: Oh boy, Blair, you're bringing me way back to many years ago. Being listed on the Superfund puts you a train that would appear that it would go on and on forever but was not solution oriented. Our objection was not so much whether we were on the list or not, but what would happen if we were on the list that would allow us to go ahead and solve the problem.

BF: And why did the City basically go to the mat with EPA? A lot of folks would say, gee, what is wrong with this notion of being listed and then maybe we can find a way to resolve any other health problems there may be? Some folks might say why fight the friendly federal government?

AL: Well, I don't know how to say this, but the friendly federal government didn't seem to have any idea how to solve the problem once they got you on the list. And, they city hired some good outside expertise, who said that they way to solve this problem, since the tailings were low toxicity, high volume is to bury them. And so we just wanted to proceed to bury them in keeping with the technical advice we received. And had we remained on the Superfund list, we would not have been able to proceed to solve the problem. So, from the time we were listed in 85, I think that all of Prospector had been covered by 1987, say. So 2 years.

BF: You told me that part of the problem was that the process didn't seem to work right. That is seemed to more about finding blame than it was about finding a solution. What do you mean by that?

AL: Well, exactly that. Part of getting on the Superfund list was the first step was trying to find out who was responsible for it and to try and go out for damages to whoever had put the tailings there in the first place and that seemed counterproductive to solving the problem. We asked the Superfund people how they dealt with mine tailings in other communities. Had they checked with other regions on how they dealt with this issue? Had they been able to resolve the problem successfully? And we can find that the Superfund had no track record of solving any problem at least as it related to mine tailings.

BF: So your problem with the process was that it didn't look like it was going to solve anything?

AL: It was not solution oriented. It was "finding who was responsible" oriented and the city's approach was based on the best technical advice we could find - we wanted to solve the problem. And I think that at the time the city did that successfully.

BF: The city also at that time had some problems with what we would now call Voo Doo science, I think. That you didn't believe that what the EPA was doing was really finding anything out.

AL: Yeah, again Blair, this brings me way back. But I remember that they tested snow instead of water and I think that it turned out that the water was cleaner when it left Prospector than when it entered it. I mean there were a lot of technical glitches that clearly didn't seem to be the best science in the world working through the Superfund process and that we were able to do better by hiring independent expertise.

BF: I remember too that you got them to triple sample the water test and that it appeared that the city's lab, the EPA contractor lab, and I believe Soil and Water conservation. They couldn't agree on how much of this alleged bad stuff was actually in the water.

AL: Yes, you refreshed my memory and I remember that. That nothing about the scientific evidence appeared to be scientific, let's put it that way.

BF: That's Arlene Loble, who's now city manager in Wilsonville, Oregon. Jim Christiansen, let's start by talking about this process this time around. Is it about trying to assess blame or trying to find a solution?

JC: Well Blair, I think you just did a good job of bringing up pretty much every negative thing that happened with Prospector the first time around and we don't really want to dwell on the past. Certainly there were mistakes made, certainly EPA had our fair share of them, but that was early in our existence. I'll say what we did, we did with the best intentions and you heard one perspective. I would offer to all you folks that there are a lot of perspectives on what went on and just caution you to listen to all of them. Having said that, yes, we made some mistakes and we're happy with the way things came out in the end to some degree. We have a solution in place, the city implemented it, and they've done a good job to implement it. What's different this time around with this entire process is the way we are going about it. Again, we were new as an agency and we were doing what the Superfund law told us to do. We didn't have a lot of experience implementing the Superfund law. We figured out that it's not a one size fits all proposition, but the Superfund law does have good applications. It does have a track record of cleaning up a lot of

sites contrary to what you just heard. We have a lot of successes right here in the State of Utah where the Superfund program has done cleanup. I'm involved in a similar type cleanup with mine tailings over in Stockton and we've managed to go from initial investigation and listing to actually starting cleanup in about 400 days - 1 year. So, we've come a long way. What we're here to do is to avoid the mistakes we made in the past. I think everybody that dealt with that would probably say they would have done it a little bit differently. We're going to do it in a more open way - if we do investigations or take samples, we're going to run it by the stakeholders first so they are comfortable with what we are doing. We're going to run it by the public first so they are comfortable with what we're doing. And if we come up with information, it's going to be able to be scrutinized by whoever wants to scrutinize it so it's as above reproach as possible. Again, I just want to point out we have good intentions - I know there is the moniker that when government comes in town, they're not here to do any favors. We're doing the best we can to do our job which is protecting human health and the environment and we don't want to let anything stand in the way of that. We certainly don't want to compromise the public health of the people that live in Park City or anywhere else.

BF: Jim, last time the EPA was here they did both blood and urine tests to see if any of the heavy metals were migrating from the tailings to people, and my recollection was there was a case of a child who had elevated levels who had a crib with lead paint and the other was an auto mechanic who worked in a shop that didn't have very good ventilation. Otherwise, my recollection is that Park City residents had blood lead levels that were below the national average. Do we have any evidence, any scientific evidence, that the tailings pose or ever did pose a significant health risk?

JC: Well, blood lead studies are difficult, I don't want to get into the intricacies of them tonight - that's not what we're here for. But one blood lead study is kind of a snap shot in time. It reflects conditions on that one day. What that study showed were that things were ok - and that's good news, it was good news then and it's good news today. We don't expect that we are going to find a health problem at Prospector today, we aren't out looking for one. There was a solution put in place. All we're asking for Prospector at this point is that what we did there makes sense with what we do at other places in the watershed. We're going to be facing similar issues with development on mine waste, so we want to make sure what we did there makes sense with what we do other places, and we want to make sure what we did worked. I think anybody would say than anything you do you want to make sure it passes the laugh test and it works. I don't think it's a lot to ask to go back and say, let's make sure this was ok, let's make sure the ordinance works exactly the way it's supposed to. It's difficult to assess environmental risks, it's not an exact science. It's difficult to pinpoint, say, one cancer out of a million or something and trace that back to an exact source. We do the best we can with the science that we have, and it's certainly imperfect. And that's why when we do these types of things we need to work with you folks so you understand what we're doing, how we're doing it, and how we deal with that uncertainty. You can err on the side of caution or you can not. But it's very difficult to nail down something exact when you are dealing with environmental science - that's just the nature of it.

BF: The press - and I number myself guilty - had a field day when they started taking blood samples from the kids here in the Park City area. Are blood lead level tests on the table at this point or off the table?

JC: I'd say they were on the table right now. I don't have any preconceived solutions of how we are going to deal with those things and that's the point of this meeting is that I'm not coming in here, or EPA's not coming in here, and saying "this is how we are going to do it." Blood lead studies are a valuable tool, and it may be that when we talk to the people that this affects that they say it may be of value and we'll consider it. Is our preferred solution, or our preferred tool, to get at what we want? No, not necessarily. But everything is on the table right now.

BF: Let's talk about who's in charge here. If EPA were to decide to do blood lead studies, and the stakeholders group strongly disagreed, whose decision would it be?

JC: That's tough. As the agency of the government that's charged with protecting your health, EPA takes that very seriously. So we don't delegate our responsibility to other people. Having said that, what we intend to do here is to

work with those stakeholders and residents to do whatever we can to meet your needs. So, if a situation arises like that, it's going to have to be site specific, it's going to have to be issue specific as to whether we think the issues that are being raised override our need to protect public health, or if there's a different way to protect public health we'll consider that. So I think it will be situation specific. But it's important to note, the stakeholder group is not a voting body - it's an information exchange body, it's an idea-exchange body, and it's a way for us to communicate with a big slice of the neighborhood. Again, we take our responsibility very seriously, we care about the public's health, and we're not going to compromise that.

BF: The stakeholders group can advise and consent but it's EPA's call?

JC: In the end. What we're doing here that's a little bit different, it's not going to be EPA doing the study, or EPA taking the samples, we're going to use a variety of resources and programs. It may be that a State program is a better way to handle it; in that case, the authority may be delegated to the State and they make that decision. It may be that neither the State or Federal government is the most efficient way to deal with something. In that circumstance, we may delegate our authority to the city. We want to use a variety of resources. If the county health department can help us, we may use them. So it's not EPA strictly saying we're going to use our resources and we're going to use them our way - this is truly a team approach to doing business.

BF: Jim, we've heard some reports that there's still within EPA and within the State Health Department, some institutional resentment about how Park City got Congress to override the proposed listing on Superfund, and I think there's some in this room that would ask the question is reopening the investigation about public health or about evening the score?

JC: I'm kind of insulted by that question, Blair. The federal government, we're not out... we don't have a big agenda, we don't have any kind of conspiracy going. Quite frankly, we're not good enough to manufacture a conspiracy. The fact of the matter is that we take our job seriously, we care about public health and the environment. There's nothing as trivial as us getting back at Park City. Certainly, we were concerned about the way things went in the 80s, because we wanted to do our jobs and it didn't go exactly like we hoped. It may have turned out all right and I think it did, but I think to bring up issues like that undermines what we're trying to do here.

BF: Finally, Jim, the State Health Department was kind of the lead contractor and there were times when we in the press would get contradictory statements from the State Health Department and the EPA. This time around, whose responsible for contact with the public and what will DEQ's role be?

JC: Well, I'd like Brad to follow up on what I have to say, but we're all independent entities here. The State has a right to talk, or speak, or act on behalf of the State it represents. We represent a little bit bigger entity - the entire country. So, we will both speak on our own behalf. Having said that, DEQ and EPA try to work as partners. We try to combine our efforts to make sure what we're doing makes sense for each other and that we don't duplicate efforts. So I'm going to speak for EPA, the State's representative is going to speak for them, but we're going to always make sure that what we say makes sense together. Are we going to make mistakes? You bet we will. We're human. But we'll do the best we can to give you folks a clear picture of what the regulatory agencies want and expect, and I think that's all you would expect.

BF: (Commercial) Brad Johnson, in November 1987 the EPA Inspector General released an audit report of the Utah State Health Department that was very critical of how the State was administering the Superfund program at that time. In particular, EPA was critical of how the State had handled the Prospector investigation, accusing it of reversing it's recommendation to list Prospector, saying the department had caved in to what it called political pressure. Have you and EPA since come to an accommodation and are you going to be able to work together on this?

BJ: Well, we're definitely going to be able to work together. I'm not sure that I would agree to the characterization that we caved into political pressure, I think what we did was arrive at a negotiated solution to a very difficult problem. As Jim has mentioned, we are much better at this business than we were 15 years ago, things go much smoother than they have in the past, and we have demonstrated that on a variety of sites since then. We are definitely committed to working with EPA and to making sure we work closely to try and find solutions to these problems. As Jim mentioned, we are an independent agency however, and if we do have disagreements, then we will raise them with EPA and with the other stakeholders and we will do everything we can to resolve those differences of opinion and try to find some sort of common ground.

BF: What is the Health Department's position with regards to the health hazards of tailings in the Silver Creek drainage? Does DEQ at this point believe there are health hazards?

BJ: Based on the concentrations of lead that we are aware of in the tailings, there is a potential for a health hazard. Whether or not there is a health hazard in the context of people who have been exposed, we don't have the data to know that one way or the other. But based on the sophistication of the investigation processes we have in place now, and how we evaluate the risks associated with lead and arsenic in tailings, the concentrations are high enough that there is the possibility and that is what we want to try and make sure we mitigate.

BF: So, how do we spell potential?

BJ: Pardon me?

BF: How do we get at that word potential?

BJ: Well, potential means essentially that if someone were to be in those tailings for a sufficient period of time, if they were to get the material ingested somehow that there is the possibility that they could experience the detrimental effects associated with lead. But there has to be the exposure. And that's essentially what the Park City Ordinance was designed to prevent was that exposure.

BF: Okay, so I'm in trouble if I eat the tailings but otherwise I'm ok?

BJ: It would be unwise to eat the tailings.

BF: Last time the State Health Department was the lead contractor in the Prospector Square investigation. Will that be the role you're playing this time around or will it be different?

BJ: I would say that our role this time will be different. We will not have...as Jim mentioned earlier, it depends on the individual circumstances. As we work with the stakeholders on how to resolve these problems, we may have a more prominent role in some areas and a less prominent role in others. It all depends on what mechanism we jointly decide to use in order to address the problems.

BF: Who will speak for DEQ on this issue? Will it be you?

BJ: It depends on the issue and how complicated the issue is. In a lot of situations, yes, it will probably be me, it could be my immediate supervisor, it could be the staff people. It depends a lot on the question that's being asked and the forum in which it's being asked, and a lot of other issues.

BF: Toby Ross, given the interaction you've had with the EPA over the last year or so are you convinced that this is a kinder, gentler EPA and this will not be the sort of adversarial relationship that we had last time?

TR: I don't think it will be the sort of adversarial relationship we had in the past. I'm cautiously optimistic that this process will have a better result and will be more satisfactory to the general citizenry. I'm not absolutely convinced that we won't have difficulties as move forward, but we'll be paying very close attention to it.

BF: I believe there are some 30 or so properties in Prospector that have yet to be tested or soil capped. Is that correct?

TR: There are probably at least that many.

BF: Didn't the city promise the EPA to have this done by now?

TR: When Jim approached us about a year ago, we were in the final year of this effort. We talked to him about the relative priority of getting this program going or accelerating the efforts in Prospector and I think came to a reasonable understanding that we would continue to work at an efficient pace to deal with any of the untested or uncovered properties, but we wouldn't embark on any extraordinary means at that point, because we didn't know where we were going with the whole study. And so, I think, and Jim certainly can answer this, that we are reasonably comfortable about the progress we are making.

BF: Do you anticipate that the outcome of this will be that those who have not been tested or capped will be required to do so?

TR: There are two major areas of concern, Jim mentioned that there were three, the ground water, the surface water, and the soils. I think that we'll conclude relatively quickly that ground water really isn't an issue and that it's surface water and soils. We've spent most of our efforts so far on the surface water and we haven't gotten into the issue of soils. I know it's EPA's concern that we would adopt procedures that would be applicable in a broad range of areas, those procedures may involve mandatory testing or something like that, but we're pretty far away from drawing that conclusion. So I think it's premature to answer that.

BF: Last time around, there were those who charged that the city seemed to be more concerned with property values than about the health of it's kids. Shouldn't we from a city's point of view be happy to have EPA back doing this investigation? Some people would ask that question.

TR: Well, I think that the characterization that we were more concerned about property values than kids is probably felatious. But, we were certainly concerned about unnecessary environmental and economic impacts on Park City and we were looking at mechanisms to deal with that. I think this time around there's no question that we are concerned about the same things that EPA is concerned about. We do not necessarily agree that the best course of action would be for EPA to undertake an independent determination of how to resolve those issues. They're not proposing to do that, and so we are marching along together towards any resolution of environmental problems here.

BF: The EPA has identified Silver Creek, also known as Poison Creek by the old timers, as not meeting water quality standards for heavy metals. Now, a lot of us walk our dogs along the rail trail there and I've certainly seen children playing in the stream and in the pond at Prospector Park. Are you concerned about the health risks if those kids are being exposed to that water?

TR: Well, I don't know that the water exposure - if they're not drinking it - is a great problem, but I think that we need to look broadly at the question of contact and that's one of the issues we'll be talking about. There's a major area just to the east of Prospector Park that's under the jurisdiction of the BLM. That area is really a concentration of mine tailings and process waste from mining activities. They, BLM in conjunction from EPA, has basically segregated that from public access as the mitigation for the problem. And so I think we need to look not only at areas of high concentrations of material but also if there might be an opportunity for human contact.

BF: You know of course about the health problems that have been reported by some teachers at the middle school and that school is built on and by some tailings. Shouldn't we be concerned, as some have suggested there might be some connection there. Isn't that something that we should look into?

TR: Well I know that it has been investigated without a lot of definitive conclusions. But I don't think that anybody is suggesting that the problems with the buildings there really relate to the ground that it's built on, so much as the materials which may have been incorporated into the building itself. The school district has had their experiences with mine waste or heavy metals and have complied with the city's requirements, and we think with that compliance they have preserved the public health.

BF: I've been told that the suggestion has been made to put the investigation off for two years until after the Olympics. To your knowledge, is the City, the State, or SLOC putting some pressure on EPA to delay this study?

TR: I'm not aware of any pressure; we asked the question, they said 'no'. It was kind of a short discussion.

BF: So you tried?

TR: Sure.

JC: Blair, can I interject a little bit there. It's not that EPA is necessarily pressuring that we do this now; we want to make progress. But one of the things that's going on pretty much as we speak is development and remediation of the city's transit center. The city asked us to move quickly on that site as they developed it and we accommodated them. UPCM is also interested in moving forward with the time table on their development and we want to accommodate that as well, for the reasons I've said before, so that's our interest for moving now. And I think all the stakeholders here share that concern. (commercial)

BF: Kerry, you had a question...

KG: Yes, I just wanted to make a comment on that as well. United Park is interested in moving forward on its project in the Flagstaff area as well as the golf course on Richardson Flat. I just wanted to make the point that it is a requirement from the development rights that were granted by the city through the development agreement that we seek agency oversight and review on any mitigation or reclamation of any of the mine sites in Flagstaff. And, so we are required pretty much by that approval to come to the EPA and the State and seek review of our plans for Flagstaff and Richardson Flats.

BF: Back to Toby for a second, the city already has a problem with levels of arsenic in water from the Spiro Tunnel and exceeds EPA standards for antimony in our water. Shouldn't residents welcome EPA coming in to take a look at those drainage's where we get our water?

TR: I don't think residents have anything to fear EPA coming in. They're coming in with an approach and a process that is different than the past, and so I don't think that there is anything to be concerned about. I think, I believe, that we will comply with Federal regulations whether EPA is sitting in Park City or sitting in Denver or in Washington. It's our intent to comply with regulations.

BF: If Silver Creek contains high levels of heavy metals now, is it not just a matter of time before that bad stuff creeps into the Park Meadows well, which is a major source of the city's water?

TR: No, I don't think so. Really we haven't seen a lot of migration of materials either in soils or in the stream as in, yes, the concentration in surface water goes up as it goes through tailings but it doesn't seem to get into the ground water and the geologic strata that we're dealing with, the Thaynes Formation, really flows the other way and is not likely to be contaminated by Silver Creek.

JC: I can kind of follow up on that to some degree. Ground water up in the area of the mines, the mine workings and stuff, Blair mentioned arsenic in the tunnel in Thaynes Canyon, that's no surprise. That's just the nature of having mine workings below a mountain. The water that's taken from there is treated just the same way EPA would treat it, and it's tested against the same extremely stringent standards as any place. So you're water is as safe as the next place. Antimony is a problem you've heard about in the news, and it's a difficult one to deal with. But the levels we see here certainly aren't off the scale, they're just a little bit above the standard. We don't have a way to treat that right now, nobody does, and Park City is not unique in that circumstance. So we are working on that. The other areas where ground water is used as a drinking water resource, it comes from very deep in the ground. In general, the water in those formations tends to push upward. That tends to keep things on the surface, like mine tailings contaminated water, from going down to that source. That's why we are less concerned with ground water as Toby mentioned- we are more concerned with ground water that feeds itself into Silver Creek.

BF: Kerry Gee, let's talk a little bit about the difference between mine tailings and rock waste from the mines. When you look at those big piles up where you're going to develop Flagstaff, is that the same stuff that ended up in Richardson Flat or no?

KG: No it isn't Blair. The piles that you see in the on the side of the mountains up in Flagstaff and around the Park City ski area are piles of rock that were generated with the development of the mines underground. Generally, they do not...it is not the material that was mined that has a lot of value. What we have found is that that material does contain some elevated levels of certain metals - lead is one, zinc is another - and what we believe occurred is that when the miners were working in the mine they would take the overburden, this dump rock, out of the mine in the same ore cars they brought the ore out with. And they didn't sweep the cars clean between use, and as a result we have some residual fine material that's incorporated itself into the dump that is metal bearing material.

BF: Is that leaching? Being leached by rain water somehow?

KG: Some of the work that we intend to do this summer is going to address that particular issue. Right now, we don't have enough data to be certain of that or to determine the level to which it is occurring if it is indeed occurring. The tailings, or the mill waste, the waste from the beneficiation of the ore materials are what you see out at Richardson Flat and are what are present in Prospector. That material is a waste product that is left over after the milling process, or the process that retrieves the more valuable material from the ore that was mined in the mines.

BF: What's at stake here for the mining company? If the EPA finds tailings that have to be removed, is United Park on the hook to fix the problem?

KG: That's something that's difficult to answer at this point in time in the investigation. There are certainly issues on mining company property, and that we have to deal with. And we intend to do that, to work with the agencies and within the stakeholder process to do that.

BF: I'm kind of curious, Jim, you mentioned Richardson Flats as being a Superfund site. But you told me this afternoon Kerry that you didn't think it was actually on the National Priority List.

KG: It's not on the National Priority List, it is proposed for listing on the list and I believe that's been it's status since about 1993.

JC: I can't recall exactly what I said Blair, but I think I said it was close to being a Superfund Site, it is proposed for the National Priorities List. Superfund is used as a label for many things, but I think the truest sense of the word is if the site is final on the National Priority List. When you make a site final on the NPL, that makes the site eligible for EPA to use the Superfund to clean it up. In the circumstance where you have a cooperative, willing, capable party such as United Park we don't gain a lot by putting the site on the NPL, so right now we don't have any intention of

going final on that list and making the site a Superfund Site. So it's the only site in the area, right now, that's close, but I agree with Kerry - it's not there.

KG: Of all the mine sites in Park City, it is definitely the one that is deepest in the process, if you will. Superfund is a term that unfortunately, is thrown around in somewhat of a reckless manner and it can be real damaging from my perspective, not necessarily the mining company's, for anyone who may own property or live in an area that may have issues, you hear the word Superfund and pretty soon people think it is a Superfund Site and it isn't even close to being a Superfund Site.

BF: I was told once many years ago, correct me if this is wrong, that the mining company continues to have a small staff of people who go underground so they can maintain kind of the facade that you are still actually in the mining business and that the reason you do that is because an active mine is exempted by some of the old mining laws from having to meet some of the EPA regulations. Is that true?

KG: Well, that's a long question with several different questions embedded in it. We do have a small staff of people that go underground everyday to maintain the #3 shaft up at the Ontario Mine and the Ontario Drain Tunnel that carries water from the mine out to the surface of the ground and it is discharged into the Jordanelle Reservoir. The mining company keeps that tunnel open to facilitate that drainage of water and we are required to treat that water at the portal and monitor the metal level prior to it's discharge into the Jordanelle Reservoir. As far as putting up some sort of facade to escape some sort of environmental regulations in some clandestine manner - it is not at all true. We spend a great deal of money annually to maintain that mine and to keep that water treatment facility at Keetley operating so that we don't face fines of \$50,000 a day for violating the discharge permit.

JC: To add to that, it's completely irrelevant from an EPA perspective whether that mine is operating or not. If it was causing an environmental problem, we would address it. The thing Blair is getting at are the mining reclamation standards - you don't reclaim a mine until it's shut down. But for what we're doing here, it doesn't matter and I don't see United Park doing anything to avoid anything from EPA.

BF: I was just curious Kerry, do you guys still have the fish in the pond outside of the Keetley drain tunnel?

KG: Actually, no we don't...

BF: I was wondering how scientific that was in terms of how dangerous the water was...

KG: I can't answer that. I know that when I left Park City Ventures in 1978 they had just initiated that program and it was carried over into the Noranda operation, but I believe the fish were removed from the pond for whatever reason, I don't know, in about 1982 or 83 before I got to the company.

BF: Part of the deal with Flagstaff was to give the City a golf course on Richardson Flat. Was that a way for the mining company to sort of get out of having to clean up that site?

KG: No, we are working with the Agency right now on a process that will bring that site to closure from a regulatory standpoint and that will involve looking at the work that we've done out there to date - which is to cover all of the mine tailings that are in the area and to revegetate the area and to reconstruct some of the surface water channels in that area. We'll assess that work to determine whether or not it was adequate for longevity of the site and there may be other work involved in bringing that site to closure. But the golf course is a good use for that piece of land out there, that's why we want to put a golf course out there.

BF: Jim Christiansen, do you agree?

JC: Absolutely...

BF: Don't you have to dump a lot of water on a golf course though?

JC: One of the things we've discussed with United Park, and I think that's what Kerry is ooh ooh oohing about, is that the immediate plans don't call for putting the course on the tailings pile. United Park owns some property around the site, and I think they plan to acquire some more, but the golf course would go off the site. We want to make sure what we do, or United Park does, on the pile makes sense with the golf course. But you're absolutely right, Blair, when you put a golf course on top of it you add water and that's a problem in and of itself. But I don't think we'll face that. The nature of our work is more to determine if what's been done has been done in the proper way and if it works for what it's intended to do, and we're going to do that to the same standards we would any other site.

BF: We've reached the halfway point in our program, and I would like to ask those of you present at the Yarrow to step to the microphone at the center of the room and I would like to ask you - since a lot of people will want to ask questions - to keep those questions or statements to about a minute or two at most. For those of you who are listening at home, I cannot put you directly on the air but you can call in and ask our phone volunteer to write your question down and I will ask it. That number is 640-0208...(commercial)

Cliff Allen: I live in Prospector. Thanks for coming tonight. I have a question, it's more based on context. Toby mentioned earlier in the presentation that we're a mining town, and there's lots of other mining towns in the West. I'm wondering if there's been any similar situations to what you're experiencing here in Park City, how were they resolved, if they were resolved, and how long did it take?

JC: Very good question. And that brings to mind something up front, and that's how fortunate we are with the mine tailings. Where we're situated here in Park City, the rocks are something that we call carbonate. And carbonate rocks are the best kind to have when you have mine waste because they keep it from becoming acidic and they keep the amount of metals down to a minimum. So the problems we see here aren't as bad as we see at other mining sites, and that's real important to keep in mind. I think because of that we have a really good chance of success when we talk about things like cleaning up Silver Creek. At other mining areas in the West, it's been a lot more difficult and the situations have been a lot more extreme. We've had a lot of success when we talk about how we've dealt with these sites: some have been dealt with through State programs, some have been dealt with EPA, some of the mining sites in the West are the biggest Superfund sites in the country and they may never be returned to the natural state. But we'll do the best we can. In terms of the problems we face at Park City and have we dealt with them at other places? Absolutely. What we did at Prospector is one way to deal with it. Covering it up. We've had other sites right here in the Salt Lake Valley where a smelter or mill or something like that left heavy metals in soils around a home or a residential area and we've taken steps to mitigate those. Again, there's no one size fits all solution but we've had quite a few successes through Superfund. The one I pointed out earlier in Stockton is going particularly well, we've also done a number of other cleanups in the Salt Lake Valley that have been successful. So, to answer your question in short, yes, we have had successes. The time frame has range from about a year, to ongoing - a long time - depending on the magnitude of the problem. I think we have a very good chance for relatively quick success in Park City. (commercial)

Suzanne: Fred Fox called - question for Jim Christiansen or Brad Johnson. His first question - is this a bonafide Superfund project? Will the closure be funded by the Superfund?

JC: Well, as I mentioned before, the only we can actually use Superfund dollars to clean up a site is to list it as a Superfund site, and we don't want to do that here. We can use EPA funds or State funds to conduct investigations, and to the degree we are a member of the stakeholder group and need to contribute resources, we may use Superfund money to conduct investigations, but I think the majority will come from a variety of sources. United Park is funding quite a bit of the work, Park City is funding quite a bit of the work at the Marsac Mill. So, again, I think it's a combination of resources and no one agency is going to dictate or provide the resources.

Suzanne: Question number 2, same gentleman. How many mine sites have you successfully cleaned up and taken off the list and given them closure

JC: That's a tough one for me to answer off the top of my head. There's different levels of "doneness" with Superfund, if you will. One of the misconceptions we've suffered with is that people don't consider us done until we take a site off the NPL. Congress has badgered us by saying, "hey, you've only taken x sites off the Superfund list." What we've done, we've created a different label which is construction completion and that's when we've done all the physical work we're going to do. It may take a while for the natural environment to recover, or for the ground water treatment or whatever system we have in place to meet the standards and we won't take a site off the list until it does that. With mining sites, you're dealing usually with a large volume of waste and the goal is to return the environment to a natural state and that's very difficult to do, so I can't answer the question and say x amount, but I know we've made a lot of progress and there are some sites we've actually taken off the list.

BJ: I might just add that there are two major smelter sites in the Salt Lake Valley that as far as we are concerned they are done and any construction we're going to do is done. We have 3 or 4 that are still ongoing that it's hard to project right now how long they are going to take, but we have completed some, we have a lot of experience doing these kinds of things now, and things can go relatively quickly.

Suzanne: I would have to ask a question of my own...will Prospector ever be completed? I'm a veteran of the first time.

BJ: If you ask, it depends on how you define completed. Because whenever you leave the tailings in place, there is going to be some sort of control, some sort of city ordinance, such as the Prospector Square Ordinance in place, which will control that contamination so that it is not spread out again.

Suzanne: Will that satisfy you all from coming back again?

BJ: Yes. That's essentially what we've done at some of these other sites. Well, when you say we'll never come back again, we revisit it periodically just to make sure it's still functioning properly...

Suzanne: Just to make sure my property values don't go up too much. All right...do you have the science in place, how are we going to measure what we're looking for here...this is more listener questions.

JC: Science has come a long way since we first dealt with this in the 80s, but I'll revisit what I said before. Environmental science certainly isn't an exact science, nor is toxicology, the study of finding out what causes illnesses in humans. They're both inexact sciences, so we have to do the best we can. But our science has come a long way. I think we have plenty of science, and plenty of knowledge and experience to deal with these issues. I don't expect to see discrepancies in data between different agencies like we did in the 80s. I don't expect to have a lot of controversy on those regards but if we do, I think we've got a system in place here of cooperation and review where we'll be able to deal with it.

Suzanne: Do you have measures in place to fix what you find is wrong?

JC: We have a variety of ways we deal with these things, and again there isn't a one size fits all solution. That's not fair to Park City to say we're going to do what we did in Midvale in Park City because it might not work. We certainly have a lot of tools for dealing with this - with mine waste, there's no magic way to make it go away. You can't treat it or burn it or anything like that, so you've got to do something with it. That may involve covering it up, it may involve taking it away to a landfill, there's different ways to deal with it. We definitely have the knowledge and the tools to do that, it's just a matter of figuring out what needs to be done or what works for Park City.
(commercial)

Sally Elliot: Yes, a listener question from Bill Mullen. He says as an individual who has one, and soon to be two, properties in Prospector, what has prompted the EPA to become so visible at this time? Is it Prospector which has never been as visible as Love Canal? Is it Flagstaff? Is it Quinn's Junction/Richardson Flat? Or is it the Olympics?

JC: Well, I definitely hear a little bit of tongue-in-cheek concerns with that one. I appreciate those. Certainly, Prospector is not Love Canal. Prospector is one of our lower priorities here. I mentioned before that the reason we're concerned about it is we're going to face similar issues at other places, and we want to make sure what we did at Prospector worked if we're going to apply it somewhere else. We want to make sure what we do at one end of Park City is the same, or as close to as we can, as the other end of Park City. I think that makes a lot of sense. In that regard, Prospector certainly isn't the driver and if were the only thing here, we wouldn't be this visible. We may be working with the City, like Brad said, when you leave materials in place over time and manage them. That doesn't mean we are reopening them, it just means you're dealing with what's there. The answer to the big question is all those things made us become more visible and I think I touched on that at the beginning. The combination of development, and that's very important - all those sites that were mentioned: Richardson Flat, Marsac, and Flagstaff are all part of that. The picture is changing, so where we weren't as concerned with them sitting out in the middle of the woods before, we may be concerned if there is a house on top of them. So that definitely made us heighten our visibility. I think we are being more visible because we want to be more public. We want for you folks to know what's going on, it's no mystery, and the only way we can do that is in the public eye. That's going to raise some eyebrows. We know we bring a stigma, we know we bring a presence. But I want to paint this in a positive light. There's no big health threat out there, we're dealing with the legacy of a mining town and we're doing it in a productive, cooperative way. So those are the primary reasons why we're a little bit more visible now.

Lisa Kershner: My name is Lisa Kershner, I'm an attorney at Parsons, Bailey, and Latimer and also a Park City area resident. And I guess I have just a simple, fundamental question and it's about the potential duplication or how you are going to coordinate multiple federal agency programs. In particular, I notice that in your fact sheet you indicate that you're going to try to examine water quality concerns and coordinate with the Clean Water Act process for TMDL. Well the February 17 draft, the latest version of the State's 303d list, and it's been referred to in some respects here tonight, the Silver Creek as listed for I believe cadmium and zinc. As we know, the requirements under the Clean Water Act under section 303d mandate that the State as the agency with primacy develop an implementation plan and develop a loading plan, and implement how they are going to address water quality impairment issues in the Creek at least within 8-15 years, and for high priority streams such as Silver Creek is, arguably much sooner than that. I wonder how you are going to try to coordinate your process with a separate, and potentially duplicative, and maybe process that's at odds with the program you are currently involved with.

JC: Excellent question. I appreciate that. That's something we're actually proud of, because we thought of that and the process that we're in I think will address that very well. We don't want to duplicate efforts and certainly with environment regulations there's a lot out there and it's difficult to weed through the forest to get to what the crux of the problem is or what is the key issue. On that stakeholder group we have John Whitehead of the Division of Water Quality and DEQ. He's heading up the East Canyon Creek TMDL process as well. He's going to work with us, from a State perspective and a Clean Water Act and the 303d perspective, to make sure that the sampling plans and such we put together meet their needs and meet their requirements. And then when we formulate the cleanup plans, we're going to work with them to ensure they fit into the TMDL that's developed. So we want to overlap those processes to some degree. Now having said that, Superfund focuses on hazardous substances, heavy metals in this case. TMDL's and the CWA focus on a broader variety things like phosphorous, fertilizers, pesticides. So we won't overlap in those regards and DWQ will continue to work on those issues as they become apparent through a similar process as is unfolding at East Canyon Creek. So where there is overlap, we will coordinate efforts so we don't duplicate and what we do makes sense as a whole.

BF: For those of who don't speak fluid agency here, what's TMDL?

JC: The Clean Water Act regulates the nation's waterways in a variety of ways. The states set standards for water quality in different water bodies. For instance, Silver Creek is set as a cold water fishery and has water quality standards for a variety of constituents which it needs to meet those standards to have that use. If something going to be used as a drinking water source, and Silver Creek is classified as a potential drinking water source, it needs to meet certain standards. In order to do that, you need to know how much a particular water body can accept of a particular constituent. How much phosphorous could Silver Creek take from different sources - because you know it's going to come from somewhere - before it violates those standards? The TMDL program, which stands for Total Maximum Daily Load, is a way of rationing out inputs into a stream so you know where the sources are coming from, and if it's violating the standards it sets a plan for cutting back the various sources so that you meet water quality standards. So it's really just a system that's worked out with local stakeholders to manage sources of contamination into water bodies so that those water quality standards are met. (commercial)

Lisa Kershner: Blair, if I may, I'd like one more question. Someone indicated that perhaps some of the source of potential pollutants to the creek was associated with BLM property to the east. I just wondered if BLM is part of the stakeholder group since it didn't suggest it on the fact sheet.

JC: Right now they aren't. But we've contacted BLM with regards to that particular site, which is called the Silver Maple Claims site, so they know we're concerned with it. We worked with them and coordinated with them a bit with the highway widening through there so they are aware of it. They may actually become a stakeholder at some point, but at this point they are not. But they are involved in the process, and as we start to do the sampling, or especially if we consider doing work there, their role will be greatly increased. They are also a trustee if you will as they own some land down by Richardson Flats and as we've embarked on the investigation, we've officially notified the Department of the Interior which includes the BLM and some other agencies that we are going to do that, and we are going to coordinate our efforts with whatever efforts you have. (commercial)

Suzanne: This came from Dave Staley. Mr. Christiansen, question for you. Mr. Staley is concerned that there are other areas besides Prospector, such as Old Town and Park Meadows that are involved and will you be testing those sites?

JC: Absolutely. I'll say it again, Prospector isn't the focus of this investigation though it seems to be getting the most press. That's not by my design - I don't want to talk about it. Prospector, we've got a solution in place, and we're comfortable with that, so we're more in a checkup mode. Some of these other areas, we are just finding out about, so they are going to be a little more of a focus. So, absolutely we're going to be looking at other areas. The whole point of a watershed effort is to look at everything, so you don't miss anything and you don't have to come back and do something after the fact.

Suzanne: This question is for Kerry Gee. He heard the implication that the heavy metals in the overburden was only due to the lack of good housekeeping with the ore carts. Is that what you meant to say?

KG: Well, I don't think that I want to imply that there was any poor housekeeping. But basically, as the material, the ore let's say, was brought up out of the mine and dumped into the process, there would be residual material on the inside of the ore car. And if that ore car was then used somewhere in the mine to bring out material that was not ore, and then dumped over the mine dump, then it would take with it some of those fine-grained metal bearing minerals that were stuck to the side of the car.

Suzanne: Is that to say that there are no heavy metals associated just with the overburden itself.

KG: On a lot of the rock piles that you see on the hillside, that is the case. There aren't any. But on several, right in the Flagstaff area, of the larger ones in particular, there are some elevated levels of metals associated with some of those bigger piles.

JC: With mine waste, it's a matter of degree. You have some rocks, like Kerry said, that are relatively benign and they don't have metals at levels that we can detect with the instruments that we have, which means they are really, really low and practically not there. With other overburden, where you tap into a little more of that ore body, they'll be metals in there but they'll be at lower levels. Then you get into the actual ore and the metals are somewhat higher. When you concentrate those things through the milling process, that's where they get present in concentrations where we are really concerned. So areas where milling went on are generally the ones that are the worst. But there are some overburden sites with metals high enough to cause a problem, but generally they are far lower. (commercial)

KG: If I may Blair, excuse me Dana, I wanted to follow up a little bit on what Jim had said just to kind of point out an example. Looking at lead, the ore that was mined in the mines, let's say it was maybe 10%, that would have been 100,000 parts per million. Some of the levels in the Flagstaff areas that we have been seeing on some of the mine dumps have been around 3-7000 parts per million. So it's a very large gap in between those two materials. The concentrated material that Jim talks about, the actual concentrates that may be sent to another processing facility, may be as high as 50% lead. Which would be tremendously high in parts per million value if you want to do the math.

Dana Williams: Actually part of the stakeholders committee representing CARG. Toby, I don't want you to get bored so I'll give you a question. There's been a lot of reference to the Prospector Square Soils Ordinance, but it's my understanding that we no longer even call it that. Could you explain, what the parameters are for that soils area and kind of what's happening in that. And then the second part of the question is, I was afraid people might be mislead as to the problems in Richardson being lead, and there not necessarily lead, and maybe what's going on with zinc out there and how Richardson may actually be acting as a filter right now, and so could you guys explain that too?

TR: You are right. There have been erroneous references to a Prospector Ordinance; we actually have a Park City Landscape and Maintenance of Soil Cover Ordinance. No reference to Prospector at all, and in fact it covers a bigger area than what has traditionally been designated as Prospector. It comes farther up into the lower Old Town area. The basic feature of that ordinance is to maintain clean soil cover between the tailings and the public and the mechanism for doing that is test cover and retest, and once we've done that for a property we provide a certificate and that certificate then is a basis for people to have some reasonable confidence that the area of exposure is highly minimized.

BF: Jim, can I just ask a follow up here? If you come to closure, does that mean that the requirement for that testing and getting that certificate will go away in my lifetime?

JC: Well, I want to go back to Dana's question so we don't leave it unanswered and the I'll answer your question Blair. I think you asked was the problem at Richardson Flats lead or are there different problems throughout the watershed in general and that's very true. Lead is one heavy metal that's of concern particularly in a residential scenario in the soils. We have other issues here, the primary one with the water, the surface water, is zinc. I mentioned before that we have carbonate rocks and that keeps the environment from being acidic. Zinc is one of the few metals that dissolves into water when it's not acidic at high concentrations, so that's why we have a zinc problem. Zinc can cause different problems with the food chain and with aquatic fish. At high enough concentrations it can cause problems in humans, but that's not what we're really concerned with here, it's more of an environmental issue. Coming off a variety of these things, Richardson Flat included, the primary metal is zinc. There are other ones, but zinc is kind of our flag metal, if you will, that we are going to trace the most because if we fix that problem, we'll probably fix the other ones as well. Richardson Flats, the data we've seen so far, both EPA and Park City Mines data, when Silver Creek passes by the site it's actually cleaner on the other side these than it was upstream of it. It really has a net dilution effect. So, Richardson Flats is putting a little zinc into the water, but it's not as much zinc as is in Silver Creek above Richardson Flats. That's what we're seeing right now, but we're going to look at it's input to Silver Creek as well as everything in the watershed in that Total Maximum Daily Load Program to see where we

can cut the zinc back where it makes the most the sense to cut it back, so that the whole creek meets the standard. Is that good, Dana?

Dana: Yes.

JC: And then Blair, could you repeat your question?

BF: There are a lot of folks here who are property owners in the Prospector area and my question is kind of a follow up to what Toby said. Will there ever come a point in time if we reach closure where the soils testing and the certificate that have to be issued when property changes hands goes away?

JC: Well there's different ways, and different degrees, of closure and I don't mean that in a sneaky way, it's just the truth of the matter. If we had the luxury of digging up those millions of cubic yards of tailings below Prospector and moving them then we wouldn't have to do any more testing and we wouldn't have to worry about it ever again. We didn't have the luxury of doing that, so it's still there. We're covering it with some dirt. When you have a situation like that when you leave the waste in place, you need to monitor it, you need to manage it over time, so you make sure that that six inches stays there, that it's effective. If I told you that we had strychnine, or some other poison right below your yard, I think you'd want to make sure that - yes, arsenic - you'd want to make sure that that dirt stayed on top of it. So, that's our only concern. It doesn't have to be EPA that does that, but I think that soils ordinance is kind of a perpetual solution that we'll have to continually deal with. (commercial)

Craig Johnson: I'm also an attorney with Parsons, Bailey, and Latimer but also a homeowner in the Prospector area. Really, my question isn't directed specifically at Prospector today. I wanted to point out Jim, is there, I realize the primary focus is on heavy metals, but taking a watershed approach to this, are you also looking at other contaminants such as phosphorous, phosphates, ground water contamination from, for instance, underground storage tanks? Are you looking at just mine waste sources? Are you looking at old smelter sites? Contamination from fugitives, contamination from the old leaded gasoline? Are you taking kind of a holistic approach to the thing, or kind of a focused approach?

JC: Kind of a bit of both. As I mentioned before, Superfund only has the authority to regulate hazardous substances. The primary ones that we have here are heavy metals, so that's our focus. There could be other sources of hazardous substances out there, like you mentioned, underground storage tanks or other sources, and if we discover those, and they meet the criteria, we'll deal with them. Kerry always want me to point out that mine waste is part of it but there's other hazardous substance and he's absolutely right. So to the degree that we find those when we do our investigation we'll deal with them. For some other constituents, I think the TMDL program and the Division of Water Quality will be dealing with those. So they will do their entire investigation and they will deal with phosphorous and pesticides and all those things, but it may be slightly detached from what we're doing. Where we do overlap, again, we are not going to duplicate efforts. We'll make sure that what we do makes sense together.

Craig Johnson: I guess as a follow up are you also looking at the potential down the road of having a basin wide type of ordinance, or a basin wide type of regulatory environment, that is comprehensive and covers all aspects of all potential hazardous substances?

JC: I think to cover all aspects of all hazardous substances would be a bit big to chew on. Right now, I'll repeat what Toby said, we are a little early in the process to really say what we have in mind. There are some options out there, but we really haven't gotten to them. We don't want to put any options on the table until we talk to you folks, until we work with the stakeholder group to develop some options and figure out what the concerns. So, we don't have any preconceived notions. Certainly, what I want to do when we go through this is to make sure what do is consistent across the watershed and covers as much as we can so we can get that closure. (commercial)

Lee Beam: The construction work that's been done on 248, was there any concern that some of the material at Silver Maple Claims had been agitated, have the potential to leach back into the Creek? If so, what's going to be done about that? Also, did DOT have to approach that before they started that work?

JC: They did, to some degree. That site in our system kind of had a "No further action" status pending a water quality investigation which is what we're talking about here today. So, yeah, they did contact EPA and they worked with the City while they did that work. There wasn't an official process where they had to seek EPA's authority. We don't have that kind of authority once we give the site that kind of role. They did do some things that we requested of them, which were to put some flow gates in to maintain the flow to the wetlands at Silver Maple Claims which do a good job at cleaning heavy metals from contamination. We really didn't have the data to say what was the exact right thing to do, but we were comfortable with the highway widening and we don't think it will prevent us from doing any work we find necessary once we do the investigation.

KG: I might add one thing. There is a sampling plan being prepared to look at surface water quality issues and it will be implemented this summer, but part of that plan is to bracket Silver Maple Claims as well as to bracket any potential source or water addition to Silver Creek, so it will be looked at as a stand alone item

Lee Beam: And who is developing that plan?

KG: Right now, United Park City Mines is contracted with an independent contractor to develop a sampling and analysis plan and it's in draft form right now, it will go to the stakeholders group this week or maybe next week for review.

Lee Beam: And then will that plan be public information at some point?

KG: Absolutely.

JC: It will be out before we've decided to do it so you folks will have a chance to look it. I mentioned the repositories. It will be placed at the library and at the Marsac Building. We hope to post it on the web site, at least the important parts of it based on size so everybody can have a look at it. And again, that just goes back into the way we want to do business. In this particular instance, United Park is the one providing the resources and the contractor. The rest of the stakeholders will work with them while we develop that plan. EPA will have the final oversight to make sure what it doing meets our standards, and then we'll put the plan out to the public for you to get a look at. When we get the data back, we'll put that out for you to look at, and if we're not happy with it, we'll revisit it.

Lee Beam: And then one other quick question. Along Silver Creek, down below Richardson Flats there's a number of mine tailings that have been stockpiled and have been put off to the side. Are those going to be removed and where are they going to be removed to.

JC: We've cut our investigation off at Richardson Flats because we've got so much to chew. And that's kind of why we called this the Upper Silver Creek Watershed Investigation. Having said that, we know that there will be effects from upper Silver Creek in lower Silver Creek, so we will take some samples down there to see what it looks like. We are aware that there were tailings dumps down that way and there were some processing facilities down there. If it appears that they are a problem, we may have to address them, but it may not be this particular process it may be something separate. But we know they are there, we're not ignoring them, it's just that right now we are focusing on the upper part of the watershed - we have to fix that before we fix what's down below it. (commercial)

Suzanne: Two listeners. First question, John deBann called, and he would just like to hear you more address how a health ecosystem filters out toxins, ie plants such water hyacinths filtering out heavy metals.

JC: There's a lot of answers to that question, but in general what EPA seeks to do is return disturbed environments as close as possible to their natural environment. Natural environments are very effective cleansers. I think you've all probably seen or heard the role that wetlands play in keeping water clean. The system that sets up with wetlands, both the physical aspect with soils and the plants being there, and the biological aspect of the plants living there effectively removes toxins. In some cases, we engineer systems of wetlands to treat mine discharges or mine wastes or other types of hazardous discharges. So the natural environment is a very effective tool. You can see around the hillsides of Park City place in 1900 there was not a single tree to be found - it was just kind of nuked. But the natural environment has done a good job of recovering, and that's due again to those carbonate soils. So that, in and of itself is very beneficial for those soils and where nature has done some work, we don't want to undo that.

Suzanne: Sandy Nunez called. She has a 16 year old daughter how grew up in Park Meadows went to school at Treasure Mountain and has been drinking the water for all these years. Does she need to have her daughter tested and if so, does the testing need to be for lead, arsenic, or either or?

JC: Well, I think whether she needs to be tested is a parental call. Not EPA's call. If she worried about it, or if she's concerned about it, then I would say she probably needs to get tested. But drinking the water in Park City, in and of itself, certainly isn't going to cause a health problem. Again, this water is tested against very stringent standards as are all drinking water sources and it meets those. The antimony problem that we've talked about has cropped up very recently, because only recently have we been able to test for antimony at such low levels. So it's a relatively new problem. But I think the people of Park City don't have to fear their water supply. I want to get that message across very clearly. What we want to do in terms of ground water is make it easier to treat it at the aft end. So it's up to her, that's her call, but living in Park Meadows and drinking Park City water wouldn't spur me to get my kid tested.

Suzanne: Might I ask a personal question please? Did I hear you say that in the best possible world you would have dug up Prospector before the development went in?

JC: Well, Prospector was a big place. I don't know if it was physically feasible to move that much mine waste or financially the right thing to do. I'm just saying if we had unlimited amounts of money, and unlimited dump trucks, that would be the best solution, but it just wasn't possible.

Suzanne: Would you be dumping them in Moab? I mean where are you going to dump them?

JC: You put them in a repository and that can be a hazardous waste landfill. There are landfills in Utah that are licensed to receive that kind of waste. We do some very large excavation and removal, transportation and disposal type things. We weight those against other alternatives to see if they make sense financially or just make sense. I don't know that it would have at Prospector, that's just when you look at the neighborhood itself, that would have been the best solution but I don't know if it would have been the most practical one. And I still don't know that in hindsight.

BJ: Again, I just might add a project that we did, again, in Midvale. We excavated down to the cleanup level. In some cases we went down four feet and excavated the material and put it into the tailings pile that exists down there and then covered it with an impermeable barrier. Now that is probably the closest that we've come, except that we did leave hard surfaces in place. We obviously didn't go under houses and we left driveways and sidewalks and things like that. But it was a very costly project. It took us four years to complete it. And, again, in the best of all worlds we would take it and put it someplace where we could control it. But that's probably the closest we have ever come to even approaching that kind of a scenario. (commercial)

Sally Elliot: Another KPCW listener, Brad, wants to know does the water in Silver Creek affect the animals? Should they drink it? Should they stop? Have we tested them? Are we going to test them? What about waterfowl, because a lot of people used to hunt out at Richardson Flats and are those waterfowl affected by the tailings?

JC: There certainly could be. There are some pretty elevated levels of metals there. We don't have enough data right now for me to say yes or no for waterfowl, or trout, or things that trout feed on. We know that there's been a lot of research go in to the levels that water quality standards mimic. So, if the water quality standard is 5 parts per billion, there was a lot of research that went into seeing what the effects of 5 parts per billion were and they determined that was safe. We know it's above the standard, so based on that I would say there is a strong possibility that wildlife could be affected. I think it would be more of the things that live in the creek, trout and the food chain, rather than waterfowl, but we're going to take a look at that issue. We have the US Fish and Wildlife Service and the Department of Natural Resources at the State working with us to address those kinds of issues. And that's going to be particularly important down at Richardson Flats and down that way where the creek is perennial and it can support a viable ecosystem.

Sally Elliot: So, you will be testing the wildlife in the area?

JC: I don't know that we will test it. You can test it, that's one way to get at it. We do have some past data, some fish tissue samples, things like that. You can model it, you can just base it on water quality standards. There's a lot of ways to go about it and, again, I don't want to come in with a preconceived notion that we are going to do any particular kind of sampling, we'll just work that out with the stakeholders and the people that have good knowledge on that to resolve that issue. (commercial)

Brent Werling: I'm a resident of Old Town. You mentioned about the water quality and what I'm concerned about, because I have elevated arsenic and elevated lead, because I've got a kidney problem and I don't know if it's all related or not. What I want to know is the water quality supposedly from one tunnel, the Judge or the Spiro, were mixed or that sort of thing, so that we can get a lower arsenic level and that the arsenic level, the EPA standard, was dropped by 25 % of what it used to be, and we're still in those standards?

JC: As far as I know. I'm not a drinking water regulator but I don't know about any violations other than the recent violation with the antimony. There may have been intermittent violations that were remedied, that's typical for arsenic and things at those low levels that we regulate at. You're talking about a lifetime of exposure when we think about problems. You don't want to be exposed to it for one minute if you're drinking it.

Brent Werling: Especially me.

JC: Absolutely. I don't know the details of your question. We can get the Division of Water Quality to follow up with you, Public Works can follow up with you, as well.

Brent Werling: Yeah, I was wondering if were going to be able to get some kind of testing kits or that sort of thing for any household that wants to get it done up there, or anywhere.

JC: I don't know if we'll give testing kits. But the way I like to do business, and the way I like to do business, is if you have a concern, we want to address it. So, I don't want to go out and sample everybody's yard or everybody's tap water, but we can probably work something out where if you have a concern, we can address it.

TR: I just wanted to make a couple of comments. The arsenic issue is an arsenic issue from the Spiro source and that is treated and then that is treated and blended with a spring source, and so it does come down below the standard. With new standards, we will probably have to expand the treatment capacity. In Old Town, your source of water probably is primarily from Judge Tunnel rather than Spiro Tunnel. It probably doesn't have much in the way of arsenic, so you may not be getting it just because of where you live in town. The treatment capability of the plant brings it down to the level of the standard approximately, so depending on the level of the particular water on a particular day, it may hover around that, and then we blend it usually half and half with water that has no arsenic in it at all, and so it drops it below the level.

Brent Werling: OK. One other things, the old pipes up in Old Town, and I'm in Woodside and we're still fixing those, we hope to get it done this year. Is lead leaching from these kind of pipes perhaps?

TR: We've done studies throughout the city, and it's not unique to Old Town. We will test the water in the main out in front of your house and you will find very low levels of lead. And then if you turn a faucet on in older houses, and surprising in newer houses, you find that you may have lead coming out of the faucet. It has more to do with the plumbing in the house than either the main or lateral in the street. The best thing I can suggest there is to let your water run for 10 seconds before you take a drink. (commercial)

Shaun Sweeney: In my opinion, I guess this is a question directed more towards Toby, in my opinion the city should be more concerned with public health of its citizens rather than the stigma of a Superfund site. So, I'm somewhat concerned as to why the city asked EPA to delay testing until after the Olympics.

TR: We asked the question of whether the timing of this could be undertaken after the Olympics because the city has limited resources and we anticipate our resources will be tapped or nearly tapped in the next two years.

Shawn Sweeney: OK. 2nd question will be directed more towards Jim, in terms of, can you kind of go over in Superfund where the money comes from and does the mining company have any liability for cleaning up if in fact it's deemed necessary that some of the sites will require some remediation?

JC: Superfund gets its money for investigation and cleanup in a variety of ways. The primary way was Congress decided to institute a tax on various industries, the petroleum industry for instance, which created what we call the Superfund, this big bastion of money. The tax was active for quite a while, it's no longer active, so right now the Superfund is not getting replenished in that fashion. The other way we replenish the Superfund is from parties who are somehow responsible for the pollution. When I say responsible, that's kind of a loose term, because it's defined a lot of ways under Superfund. Somebody can have liability simply by owning the land that waste is put on, or acquiring the land that waste is put on. You can be a responsible party for generating the waste, in this case actually performing the mining. So there's a variety of ways. It's very important for EPA to keep that Superfund solvent to seek recovery from responsible parties. There was some conversation from the former city manager that all we are about is recouping our costs and we get that perception a lot. What we are trying to do is keep the Superfund solvent so we can clean up sites where there isn't a responsible party, so we have a mechanism if there is a town where there isn't a responsible party where there is a health issue, we are able to address that. So if there is a responsible party we try to get the money that is fair and that we can, and that varies from site to site how we do that. In this particular circumstance, I think it's safe to say that the mining company certainly has some liability. They own that property and they were a successor company of many of the old mining companies. We don't want to start the enforcement process right here because we are working in a cooperative process. Right now United Park is funding a large degree of the work, there funding some of the work where they don't have any liability, so we're quite pleased with that and we want to keep that system going and contribute resources to make up any slack where it exists. If cleanup is required as part of this development or any kind of cleanup on their land where there isn't development, United Park will be responsible for doing that to at least some degree. And to the exact degree, we can't say right now. We hope this to be a cooperative process where we don't have to actually do the enforcement. Right now, EPA is getting a good deal. We're not having to expend a lot of the Superfund money and we're getting a lot of the information we need and we hope to keep it going in that direction. (commercial)

Todd: I was wondering if taxpayers would be responsible for the remainder of the cleanup costs when United Park isn't held responsible for what's designated as their responsibility?

JC: By taxpayers, can I ask if you mean taxpayers in general or locally?

Todd: Local taxpayers. You said the city of Park City could be responsible.

JC: Not in the strict sense. We're not going to say "Park City, you owe this amount of money." The city of Park City is undertaking some development that they are funding with Federal Transit dollars, and the cleanup part of it will be born by Park City, and the cleanup part of it will trickle down to tax payers. How we make up the remainder from United Park, I don't know. It may be EPA that makes up that money. It may come from the Superfund and that is ultimately taxpayer money in some context. It may be State money. It may be a different source. In general, we don't hold residential homeowners liable. We're certainly not going to say the people of a particular neighborhood, you have to foot the bill. We'll find a way to do it. So, I think at best there is an indirect trickle down to some degree, but I think the costs to Park City here are extremely minimal.

BF: Jim, I'd like to give you the opportunity here to tell people as you move forward how they get involved, how they get on the mailing list, how they stay up to speed.

JC: Well, as I mentioned before there are a variety of ways we want to interact with the community and get information out there. The first one is information repositories which should be established now at both the library and the city hall building. Paul if you can maybe help me out...the book at city hall will be in the building department. At the library, you can just ask the librarian and she will direct you to where it is. So that's one way you can get information. The second way is through the web site which we're going to establish. We'll find a way to get that address out to the community but it's not set up yet. You'll be able to view information there and you'll probably be able to send us an email in some context which we'll respond to. On the little fact sheet that you have, there's a part on the back for a mailing list where you can fill out your name and email, which will put into a database and when we do mailings you can receive them, for instance a fact sheet or something for that nature. We're going to do a variety of public meetings, like this, we're not going to do them all the time, because I don't want to burden you folks with unnecessary meetings. But when we have something important to say, or when we've reached a milestone we may decide that's it's a good thing to do. So that's a way to get direct input. Everything that's said here tonight is going to be taped and transcribed and we'll use, we'll consider it. The media, again, we're going to be on the radio frequently. We'll talk to the Park Record frequently and other newspapers and we'll try to get the word out that way. Lastly, and I think very importantly, we are all open doors. There are numbers on that fact sheet where you can contact DEQ, the City, and EPA. And anytime any of you wants to talk about a particular issue I'm willing to do it and I think everybody else on the stakeholder group is willing to do it as well. So give us a call at that number, send us an email and we'll respond to it. I'm willing to come to your home if you want me to talk about a particular issue, I think this is that important, and I think everybody shares that view. So, you've got a lot of ways to get at us. When you use those methods, there's going to be a lot of time you can get involved. For instance, the sampling plan we talked about tonight. United Park has taken the first stab at it, their consultant is going to look at it, they're going to submit it to the stakeholder group. We'll review it, and we'll say we like it, we don't like it, let's make these changes. Then we'll put it out for the public to look at. You can look at it in the repositories, on the web site, call us for a copy. Then we'll make it final. Whenever we have milestone, like developing a sampling plan or telling the results of what we found, that's the time you need to take a look at those sources or come to a public meeting to give us your thoughts.

BF: Jim, you mentioned a transcript was being made of tonight's meeting. Can people write in, or email you, and be made part of the transcript?

JC: I think we can find a way to do that. If people want to get on the record, specifically with a comment or something like that, yeah, you could email us and I think the addresses are on the fact sheet and we'll be glad to incorporate that.

BF: And it's my understanding that you folks are willing to sort of hang around and answer some informal questions from folks?

JC: Absolutely. Again, we're an open door, I'm in Park City a lot, it's a better place to go than some of my other sites so I'm not complaining about it. Anytime, you need to talk, we're an open door.